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**REMARKS**

Claims 17, 18, 20, 22-24, 26-29, 31, and 33-41 are all the claims pending in the application. Claims 17-36 stand rejected on prior art grounds. Claims 19, 21, 25, 30, and 32 are cancelled herein without prejudice or disclaimer. Claims 37-41 are added herein. The Applicants respectfully traverse these rejections based on the following discussion.

**L The Prior Art Rejections**

Claims 17-20, 23, 26-31, and 34-36 stand rejected under 35 U.S.C. §102(b) as being anticipated by Hetzler et al. (1998), hereinafter referred to as "Hetzler". Claims 21-22, 24-25, and 32-33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hetzler in view of Vossen P. (2001), hereinafter referred to as "Vossen". The Applicants respectfully traverse these rejections based on the following discussion.

However, the claimed invention, as provided in amended independent claims 17, 23, 26, 28, and 34 contain features, which are patentably distinguishable from the prior art references of record. Specifically, the amended independent claims generally provide "wherein said contexts are represented by a set of documents" and "structuring the identified concepts within said each identified context by classifying said identified concepts into exactly four classification sets" and "wherein said contexts are identified by using at least one of synonyms, hypernyms, hyponyms, and meronyms of said entity found in a thesaurus" or alternatively "wherein said contexts are identified by finding prominent nodes, that comprise said entity, in an ontology or a taxonomy."

These features are neither taught nor suggested in the prior art of record. In fact, the Applicants' invention and Hetzler differ in the following ways:

1. Hetzler's work is basically a visualization tool. It works on a given set of documents. It identifies the entities from the collection of documents, maps them onto a surface, discovers associations or relationships between the entities, if they are not explicitly defined, and displays the relationships on the surface using arcs/edges.
2. Whereas, in the Applicants' invention, the method starts with a given entity. This is not a visualization tool but an analysis tool. That is, all the analysis is centered around this entity, not on any set of particular documents. However, from the set of documents it retrieves using the entity, it identifies various context associated with the given entity. And, in turn, it retrieves various document sets corresponding to each of the identified contexts, and analyzes these document sets to identify various sets of concepts associated with the given entity and each of the identified contexts. Hence there are as many sets of documents as there are contexts.

The differences between Hetzler and the Applicants' invention are summarized in the following table:

Hetzler's work	Present application
Visualization tool	Analysis tool
Document set centric analysis	Entity centric analysis
Single document collection	Multiple sets of documents
A single set of concepts are identified	Multiple sets of concepts are identified which are discovered from different document sets
Relationships are explicitly mentioned	Relationships are automatically discovered in a unsupervised way
Talks about relationships between documents as well as concepts	Talks only about relationships between entities/contexts/concepts

Additionally, page 4 (item 11) of the Office Action states that Hetzler teaches ranking said concepts. However, closer scrutiny of Hetzler reveals no such teaching. Hetzler discloses the reordering of documents not concepts as provided in the Applicants' claimed invention. The Applicants' specification (see page 5, lines 24-25), as originally filed, clearly defines what concepts are "terms or phrases that give information about the contents of the documents." Additionally, MPEP §2106 indicates that claims should not be read in a vacuum, but that terms identified in the claims should be read in light of their use and definition given in the specification. Therefore, the Applicants' claimed invention is patentably distinct from Hetzler.

With respect to Vossen, the main focus of Vossen's work is to construct topic taxonomy (multilingual wordnet database) from a collection of documents. Conversely, the focus of the Applicants' invention is to build a profile of a given entity. This is why Vossen (as well as Hetzler) fails to teach "profiling". Moreover, the conclusion reached in the Office Action that such a teaching is inferred in Hetzler is impermissible in that results are being read into what the prior art discloses in an effort to teach, but failing nonetheless, the Applicants' claimed invention. This is merely hindsight analysis.

Additionally, the building of an ontology in Vossen is based on multiwords present in the corpus. Conversely, the taxonomy in the Applicants' invention is built as follows: the node in the first layer represents the entity that is being profiled; the nodes in the second layer could be discovered using any of the clustering techniques on the documents retrieved by searching on the entity in the corpus, the nodes in the third and fourth layers are discovered using also the documents retrieved using the contexts represent in the second layer.

Insofar as references may be combined to teach a particular invention, and the proposed

combination of Hetzler and Vossen, case law establishes that, before any prior-art references may be validly combined for use in a prior-art 35 U.S.C. § 103(a) rejection, the individual references themselves or corresponding prior art must suggest that they be combined. However, there is nothing in each of the references that suggests such a motivation to combine as suggested in the Office Action. In fact, had such a motivation been anticipated in any of the prior art references, then surely some discussion regarding alternative embodiments or manners of combination would have been suggested or at least inferred in any of the prior art references. In fact, no suggestion for combination is provided in any of the prior art references.

In In re Sernaker, 217 U.S.P.Q. 1, 6 (C.A.F.C. 1983), the court stated: “[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings.” Furthermore, the court in Uniroyal, Inc. v. Rudkin-Wiley Corp., 5 U.S.P.Q.2d 1434 (C.A.F.C. 1988), stated, “[w]here prior-art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself. . . . Something in the prior art must suggest the desirability and thus the obviousness of making the combination.” There is nothing in the prior art that refers to a suggestion or desirability of making the proposed combination. Accordingly, the rejection under 35 U.S.C. §103(a) is *prima facie* defective.

In the present application, the reason given to support the proposed combination is improper, and is not sufficient to selectively and gratuitously substitute parts of one reference for a part of another reference in order to try to meet, but failing nonetheless, the Applicants’ novel claimed invention. Moreover, there is nothing in the prior art references themselves, namely

Hetzler and Vossen, which suggests a motivation to combine elements from each reference in a manner consistent with the suggestion by the Office Action. Furthermore, the claimed invention meets the above-cited tests for obviousness by including embodiments such as ““wherein said contexts are represented by a set of documents” and “structuring the identified concepts within said each identified context by classifying said identified concepts into exactly four classification sets” and “wherein said contexts are identified by using at least one of synonyms, hyponyms, hyponyms, and meronyms of said entity found in a thesaurus” or alternatively “wherein said contexts are identified by finding prominent nodes, that comprise said entity, in an ontology or a taxonomy.” As such, all of the claims of this application are, therefore, clearly in condition for allowance, and it is respectfully requested that the Examiner pass these claims to allowance and issue.

As declared by the Federal Circuit:

In proceedings before the U.S. Patent and Trademark Office, the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. In re Fritch, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992) citing In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

Here, the Examiner has not met the burden of establishing a *prima facie* case of obviousness. It is clear that, not only does Hetzler fail to disclose all of the elements of the claims of the Applicants' claimed invention, but also, if combined with Vossen, fails to disclose these elements as well. The unique elements of the claimed invention are clearly an advance over the prior art.

The Federal Circuit also went on to state:

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. . . . Here the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Fritch at 1784-85, citing In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

Here, there is no suggestion that Hetzler, alone, or in combination with Vossen teaches a structure and method containing all of the limitations of the claimed invention. Consequently, there is absent the "suggestion" or "objective teaching" that would have to be made before there could be established the legally requisite "prima facie case of obviousness." In view of the foregoing, the Applicants respectfully submit that the collective cited prior art do not teach or suggest the features defined by amended independent claims 17, 23, 26, 28, and 34 and as such, claims 17, 23, 26, 28, and 34 are patentable over Hetzler, alone, or in combination with Vossen. Further, dependent claims 18, 20, 22, 24, 27, 29, 31, 33, and 35-41 are similarly patentable over Hetzler, alone, or in combination with Vossen, not only by virtue of their dependency from patentable independent claims, respectively, but also by virtue of the additional features of the invention they define. Thus, the Applicants respectfully request that these rejections be reconsidered and withdrawn.

Moreover, the Applicants note that all claims are properly supported in the specification and accompanying drawings. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections.

**II. Formal Matters and Conclusion**

With respect to the rejections to the specification and the claims, the specification and the claims have been amended, above, to overcome these rejections. In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the rejections to the specification and the claims.

In view of the foregoing, Applicants submit that claims 17, 18, 20, 22-24, 26-29, 31, and 33-41, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

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Mohammad S. Rahman  
Registration No. 43,029

Gibb I.P. Law Firm, LLC  
2568-A Riva Road, Suite 304  
Annapolis, MD 21401  
Voice: (301) 261-8625  
Fax: (301) 261-8825  
Customer Number: 29154